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APPLICATION NO	. F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/831,555		08/14/2001	Balbir Kumar	540-311	5779	
23117	7590	12/30/2003		EXAMINER		
	VANDE	RHYE, PC		WIMER, MICHAEL C		
	8TH FLOOR			. ART UNIT	PAPER NUMBER	
ARLINGTON, VA 22201-4714				2821		

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	•		WY
	Application No.	pplicant(s)	
•	09/831,555	KUMAR, BALBIR	
Offic Action Summary	Examiner	Art Unit	
•	Michael C. Wimer	2821	
The MAILING DATE of this communi	cation appears on the cover she	et with the correspondence ac	ldress
Period for Reply	OD DEDLY IS SET TO EVOIDE	2 MONTU(S) EDOM	
A SHORTENED STATUTORY PERIOD FO THE MAILING DATE OF THIS COMMUNION.  - Extensions of time may be available under the provisions after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30)  - If NO period for reply is specified above, the maximum states are period for reply within the set or extended period for reply to the Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136(a). In no event, however, nunication. e) days, a reply within the statutory minimum tutory period will apply and will expire SIX (6 will, by statute, cause the application to beco	nay a reply be timely filed of thirty (30) days will be considered time ) MONTHS from the mailing date of this c me ABANDONED (35 U.S.C. § 133).	
Status	4		
1) Responsive to communication(s) file			
<u></u>	b) This action is non-final.		
3) Since this application is in condition to closed in accordance with the practic			e ments is
Disposition of Claims			
4) Claim(s) <u>1-6,9-23,25 and 27</u> is/are p	ending in the application.		
4a) Of the above claim(s) is/ar	e withdrawn from consideration	1.	
5)⊠ Claim(s) <u>9-12</u> is/are allowed.			
6) Claim(s) <u>1-6,13-23,25 and 27</u> is/are	rejected.		
7) Claim(s) is/are objected to.	r		
8) Claim(s) are subject to restric	tion and/or election requiremen	ī,	
Application Papers			
9) The specification is objected to by the			
10) The drawing(s) filed on is/are:			
Applicant may not request that any object	<u>-</u> , ,	•	ED 4 404(-i)
Replacement drawing sheet(s) including  11) The oath or declaration is objected to	·	• • •	
•	by the Examiner. Note the atta	iched Office Action of form F	10-132.
Priority under 35 U.S.C. §§ 119 and 120  12) Acknowledgment is made of a claim	for foreign priority under 25 116	C C 440(a) (d) an (0	
a) All b) Some * c) None of:  1. Certified copies of the priority of the priority of the priority of the certified copies of t	documents have been received documents have been received of the priority documents have I hall Bureau (PCT Rule 17.2(a)). In for a list of the certified copies	in Application No  been received in this National  not received.	-
since a specific reference was included 37 CFR 1.78.  a)  The translation of the foreign lan	d in the first sentence of the spe	ecification or in an Application	
14) ☐ Acknowledgment is made of a claim for reference was included in the first sent			
Attachment(s)			
Notice of References Cited (PTO-892)   Notice of Draftsperson's Patent Drawing Review (PTO)   Information Disclosure Statement(s) (PTO-1449) Pa	TO-948) 5) Notic	view Summary (PTO-413) Paper No( e of Informal Patent Application (PTO r:	
• • • • • • • • • • • • • • • • • • • •			

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#### **DETAILED ACTION**

#### Allowable Subject Matter

1. Claims 9-12 are allowed.

### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Brigginshaw (GB 2253947).

Regarding Claims 1-6, Brigginshaw show a device for controlling the direction of a radiation beam comprising a transmission means 1 for transmitting the radiation beam 21 from a radiation source 23, and a steering means 9N,S,11N,S for steering the radiation beam, wherein the transmission means comprises a body 1 of ferrite (magnetic) material having a central axis which forms an aperture through which the radiation beam passes, the central axis being parallel to and coincident with the direction of the radiation beam prior to incidence on the transmission means, and wherein the steering means causes the radiation beam to emerge from the transmission means spatially offset (angle theta) relative to the central axis in free space in a known direction, all arranged as claimed.

Further regarding Claims 4-6, the gradient of magnetization F is shown as claimed.

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#### Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 13-23,25 and 27 rejected under 35 U.S.C. 103(a) as being unpatentable over Brigginshaw in view of Darbowitch et al. (4740791).

Regarding Claims 13-19,22 and 23, Darbowitch et al show a conical reflector 3 mounting at the apex, the phased array 1. It would have been obvious to the skilled artisan to employ the reflector of Darbowitch et al in the array of Brigginshaw for the purpose of providing a scanned microwave beam in the azimuth plane in a 360 degree rotation, in any microwave band desired. Regarding Claims 20,21,25 and 27, modulation and demodulation means are obvious devices in a transceiver for producing and demodulating the information contained in the signal.

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## Response to Arguments

6. Applicant's arguments with respect to claims of record have been considered but are most in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Wimer whose telephone number is (703) 305-3555. The examiner can normally be reached on M-F.

Michael C. Wimer Primary Examiner Art Unit 2821

MCW 12/18/2003